RABBIT® 286

USER'S MANUAL

The Chicony's Portable Computers

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IMPORTANT:

The serial number of this computer may be found on the bottom of the cabinet close to the label carrier. You should note the model number and the serial number of the computer in the space provided and retain this manual as a permanent record of your purchase for future reference.

Model No._____

Serial No._____

Date of Purchase_____

READ THIS FIRST

Please read the User's Manual completely before operating your portable computer.

- The computer will run on either 110 volts or 220 volts. The power supply automatically senses the line voltage and adjusts itself accordingly.
- The display power may be turned on or off from a switch located on the computer's back panel, next to the AC socket. The display power should be turned off when an external monitor is being used or if you leave the computer for more than a few minutes at a time. The display will have a much longer life if you remember to turn off the display power when the display is not in use.
- If you want to add an EGA card and external EGA monitor, please use jumper on PIN 1 & 2 of JP2 on the display adaptor. It is suggested that you first get the computer running with the built-in Gas Plasma/LCD in Black and White 80 column mode. After you are satisfied with the operation of the computer, refer to the section on installing EGA and setting the proper DIP switches and jumpers.
- The DIP switches on the video card (accessible through the removable left side plate) are described in detail in Section 2-2. For performing initial system setup, we suggest configuring the video DIP switches as follows:

  1 – on 2 – on 3 – on 4 – off
- Any hard disk used in a portable computer should have auto-parking heads to protect the disk surface from damage by the read/write heads which may be caused by the normal bumps and jostling associated with moving your computer.
- Do not disassemble the display panel. This will automatically void the warranty. There are no user-serviceable parts inside. The display bezel may be removed with the Gas Plasma/LCD intact for warranty service, however the Gas Plasma/LCD should not be removed from the bezel.

Serial# CS800471

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SECTION 1

GENERAL

INTRODUCTION

1-1 GENERAL INTRODUCTION

This guidebook has been prepared to help acquaint you with the many features of your portable computer.

Bacic features include:

* 6.0/7.0/10.7/12.5 MHz keyboard switchable 80286 microprocessor.
* Fully functionally compatible with IBM PC AT.
* One/two built-in 3½" disk drives:
  1 floppy disk drive – or –
  1 fixed disk drive and 1 floppy disk drive.
* External 5¼" floppy disk drive.
* Adjustable 640 × 400 display.
* Port for direct connection of external monochrome or CGA monitor.
* RCA phono jack for direct connection of composite monitor.
* Enhanced 102 or 103 key keyboard with "Turbo Key".

This powerful and versatile personal computer is very compact and lightweight. The dimensions of the computer allow it to slip easily underneath any airline seat. The sturdy external case and comfortable handle are designed to encourage frequent and easy transportation between your office and your home. The padded nylon carrying bag will protect the plastic case and the internal components from dirt and scratches. The high density foam padding will also help prevent shock and vibration damage.

1–2 ONE YEAR LIMITED WARRANTY

The Rabbit 286 comes with a limited warranty on parts and labor. The product is guaranteed to be free of defects in materials and workmanship for one year from the date of purchase. Component failures during this time will be repaired or replaced at the manufacturer's discretion.

This warranty is extended to the original purchaser of the equipment only. All warranty work must be accompanied with a dated receipt showing the date of purchase and computer serial number. All warranty work must be cleared through the service party. Shipping is to be paid by th shipper; customer pays shipping to Chicony, Chicony pays return shipping to customer.

The warranty does not cover the cloth carrying case, the external plastic shell of the computer, or any software which may or may not have been provided with the computer. The warranty does not cover any damage which occurs in shipment of failures caused by products not supplied by the manufacturer. The warranty also does not cover any damage caused by misuse, abuse, neglect, misapplication, modification, or commercial use of the product.

This warranty is in lieu of all other warranties, expressed or implied.

1-3 MANUAL OUTLINE

This manual is divided into five sections and an appendix. We recommend that you acquaint yourself with Section 2 – Setup and Initialization – prior to running your computer. We recommend you read the entire manual to become familiar with all the features of your portable computer.

SECTION 1
* General introduction to the portable computer.
* Warranty information.
* Manual outline: a short description of this User's Manual.

SECTION 2
* Information on unpacking your computer.
* Identifying the various components.
* Assembly.
* Initial adjustments and settings.
* Turning on the computer for the first time.
* Screen adjustments.
* Setup programs.

SECTION 3
* Identifies and explains in detail the extra features of your computer, including the interface ports, the external 5¼" disk drive, and adding various external monitors.

SECTION 4
* Outlines the proper procedures to follow when moving your portable.

SECTION 5
* Advanced technical information about various components of your portable computer not strictly necessary for normal operation.

APPENDIX
* Dimensions

SECTION 2

INITIALIZATION AND SETUP

SECTION 2

This section will describe how to set-up your new computer and will outline the various ports, indicators, and switches included on all models.

2-1 SETTING-UP YOUR NEW COMPUTER

The portable computer has been shipped in a specially designed carton to protect it from damage during shipment. Remove the computer from its carton and place it on a smooth, flat surface with the cover facing you. The front cover is actually the keyboard. To remove the keyboard, use your thumbs to gently press the two latches (located in the upper corners of the cover) away from the outside edges, then lift the keyboard away from the screen and place it in front of the computer (Figure 2-1). Two hinged feet are located on the bottom of the keyboard base and can be pulled out to adjust the keyboard to a higher angle (Figure 2-2). The detachable keyboard has a flexible coiled cord which is already connected to the computer. The cord is stored in a cable storge tray located below the screen. Lift the cord out of the tray to permit the keyboard to be positioned freely (Figure 2-3).

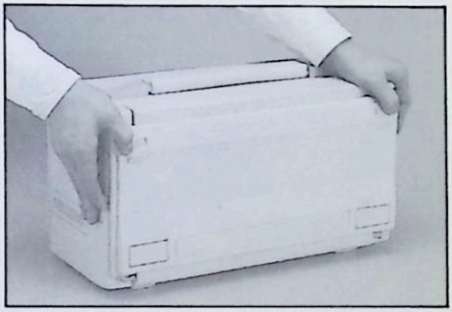


Figure 2-1

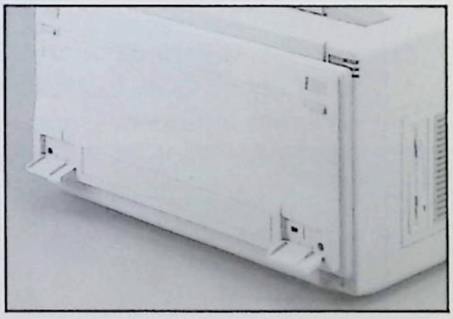


Figure 2-2

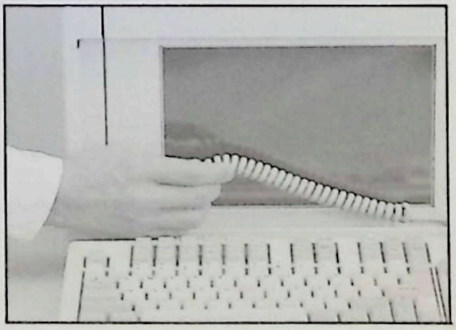


Figure 2-3

2-2 SETTING THE DISPLAY CARD DIP SWITCHES

The specially designed Multi-Display Adaptor can support CGA/MGA on either Gas Plasma/LCD or external monitor and include a D-shell 9 pin connector, a composite phono Jack and a DIP switch as seen in Figure 2-4. It is very important that you familiarize yourself with these switches since their proper alignment is necessary when selecting a different display option. Table 2-1 shows the proper alignment for the different display options. Please note **SW1-1** is a switch to reverse the LCD display mode only (blue on white or white on blue). Simply turn off the system and set the DIP switch and then turn the system back on. Also please note that when changing from either CGA to MONO or vice versa, the CMOS setup program is unnecessary, since we have already done this for you in the BIOS of this display adaptor. For more information about the display adaptor, please refer to section 5-5.

TABLE 2-1

SW1-1	SW1-2	SW1-3	SW1-4	MODE	DISPLAY
On/Off	Off	On	Off	MONO.	MGA MONITOR
On/Off	On	On	Off	MONO.	LCD
On/Off	Off	Off	On	COLOR	CGA MONITOR
On/Off	On	Off	On	COLOR	LCD

Remark: 1) SW1-1/ON for NORMAL LCD (white on blue)
SW1-1/OFF for INVERSE LCD (blue on white)

2) If your screen is Gas Plasma, the SW1-1 without reverse function.

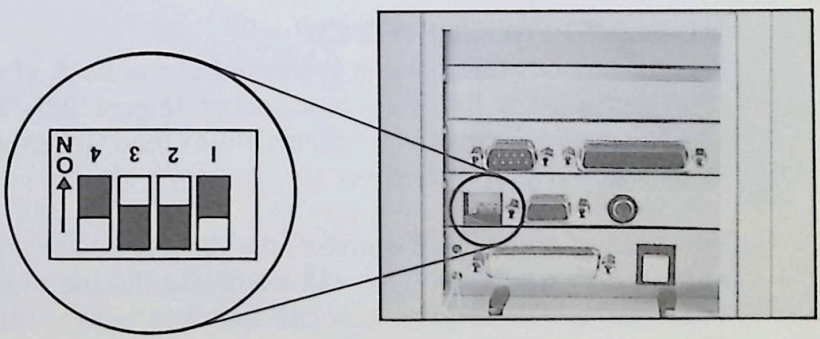


Figure 2-4

WARNING:
Please align the DIP switches according to TABLE 2-1, or it may permanently damage the Gas Plasma/LCD screen.

2-3 TURNING ON YOUR COMPUTER

Connect the power cord into the back of the computer first, then plug the other end into a well-grounded AC outlet. The ON/OFF switch is located at the back of the computer, to the right of the power socket. Turn the power switch to the ON position and the LED indicator on the screen will light up. The system's power supply provides power for the system board, keyboard, 640 × 400 2-Gray Gas Plasma / 640 × 400 LCD, backlight, both internal 3½ inch disk drives and one external 5¼ inch floppy disk drive and interface card. It does not provide power for any optional equipment, such as external monitor or printer. For more information concerning power supply specifications, please turn to section 5-6.

DISPLAY POWER SWITCH:

The display **ON/OFF** switch is located at the back of the computer, next to the AC power socket. (Figure 2-5) The Gas Plasma/LCD is almost impossible to read unless the display power is switched on.

When using an external monitor, the display power switch **should be turned off**. This will maximize the life of your Gas Plasma/LCD display. The DIP switches behind the cover plate on the left side of the computer will also need to be adjusted in order to use an external monitor.

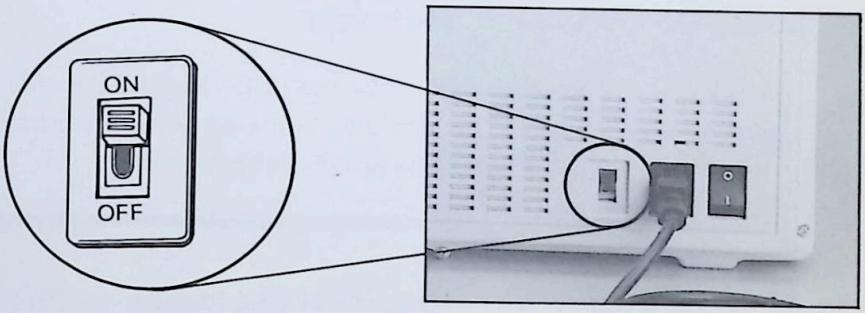


Figure 2-5

2-4 ADJUSTING THE SCREEN

To adjust the tilt of the Gas Plasma/LCD display, lift the screen up, as seen in Figure 2-6. You may tilt the screen to a more comfortable viewing position. (Figure 2-7)

WARNING:

* If the screen of your computer is Gas Plasma, be sure to lift the screen up in order to scatter the heat resulted from the Gas Plasma.

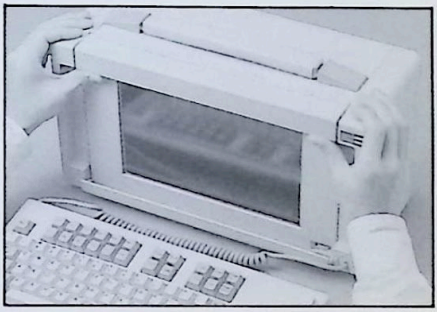
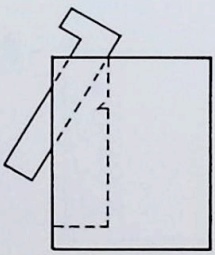


Figure 2-6



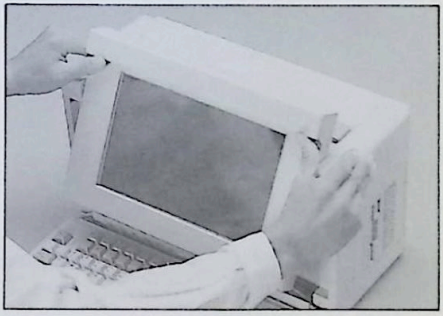


Figure 2-7

To return the display panel, first press the screen down to the bottom of the tray, then push back to the rear case. between the panel and rear case. Please see Figure 2-8.1 ~ 2-8.3 and their profiles.

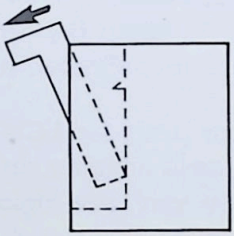
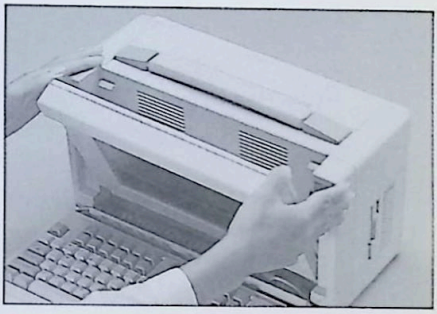


Figure 2-8.1



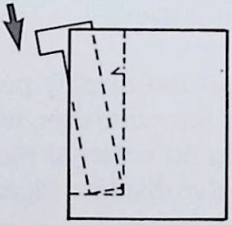


Figure 2-8.2

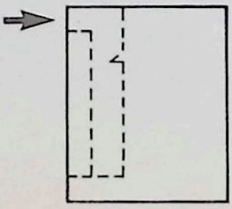


Figure 2-8.3

You may adjust the screen brightness (only for Gas Plasma) by turning the thumb-wheel located near the lower right-hand corner of the Gas Plasma panel, as indicated in Figure 2-9.

The location of contrast adjustor (only for LCD) on the LCD panel is same as that of brightness adjustor on the Gas Plasma panel by using the same way, see Figure 2-10.

There are three LED indicators located at the upper right-hand corner of the screen (Figure 2-11). The top indicator will light up when the power is on. The middle will indicate when a hard disk drive is being used and the bottom will indicate when the "Turbo mode" is being used.

We recommend that you turn off the display power switch which is located at the back of the computer near the AC socket. Whenever you are using an external monitor. This will greatly prolong the life of the display. Please refer to Figure 2-5.

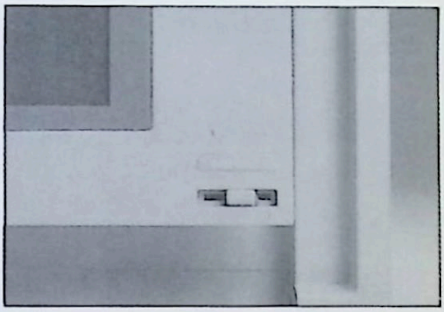


Figure 2-9

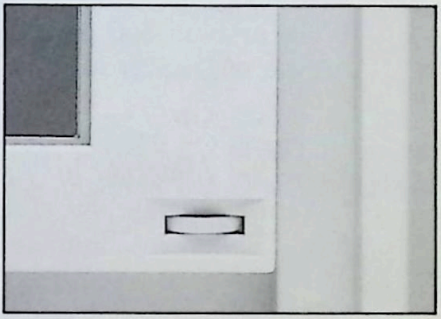


Figure 2-10

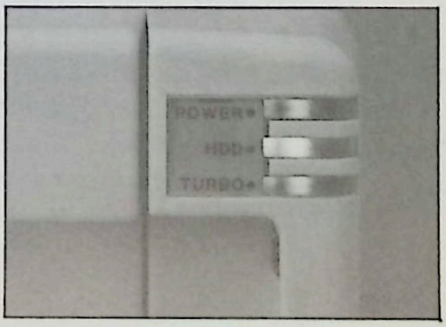


Figure 2-11

2-5 RUNNING THE SETUP PROGRAM

All AT class computers have some low power CMOS memory on the motherboard which holds special information about how the computer is configured and set up. This CMOS RAM is powered by a small battery on the motherboard so it can remember the settings when the computer is powered down. The CMOS RAM contains information about:

* Date
* Time
* Number and Capacity of the Disk Drives
* The amount and partitioning of the RAM Memory
* Type of Display Adaptor and Screen

These setting need to be changed when you:

* Use the computer for the first time
* Want to change the system configuration
* Add optional equipment to the system

You need to run a special setup program to change these settings. Which program that you run depends on which ROM BIOS your motherboard has. Some require a separate diagnostics diskette to be run from a floppy disk drive. Other motherboards have a CMOS RAM setup program in ROM and can be run without any diskette. The Chicony portable computers have many possible configurations and may contain one of several different motherboards. Please refer to the manual which came with the motherboard of your computer.

The custom designed Multi-Display Adaptor can support CGA/MGA on either the built-in display or an external monitor. The adaptor card a DB-9 connector for TTL output of CGA, an RCA phono jack for composite output, and a set of four DIP switches for display configuration.

To run the Set-up program please follow either of these two methods:

1) Insert the Advanced Diagnostics diskette into Drive A and then turn on the computer, or, if the computer is already on, reset the system by pressing and holding the CTRL, ALT and DEL keys at the same time, then follow the directions on the screen.

2) CMOS Setup: If the BIOS has the CMOS Setup option you will see the insturctions appear ted promptly on the screen. Please refer to the attached owner's motherboard reference manual to run the setup utility.

SECTION 3

OPERATING YOUR COMPUTER

SECTION 3

3-1 INTERFACE PORTS

The interface ports are located behind a cover plate located on the left-hand side of the computer. These connectors are part of standard PC AT compatible expansion cards which are mounted in some of the 5 available expansion slots. The various connectors include: (Figure 3-1)

* 1 – DB9 RS-232 serial port (COM1)
* 1 – DB25 RS-232 serial port (COM2)
* 1 – DB25 parallel printer port
* 1 – RCA-style phono jack for composite video
* 1 – DB9 CGA/MGA external monitor port

There is also a hardware reset button and the video display configuration DIP switches behind this panel.

3-2 EXTERNAL 5-1/4" FLOPPY DISK DRIVE

There is a DB25 connector on the back panel of the Rabbit for connecting a 5¼" floppy disk drive. This makes it easy to exchange data with other MS-DOS computers which may not have 3½" disk drives. (Figure 3-2)

NOTE: The DB25 connector only can be connected with manufacturer's external 5¼" floppy disk drive case. It is not compatible with other external 5¼" floppy disk drive because of the special design circuit diagram from manufacturer.

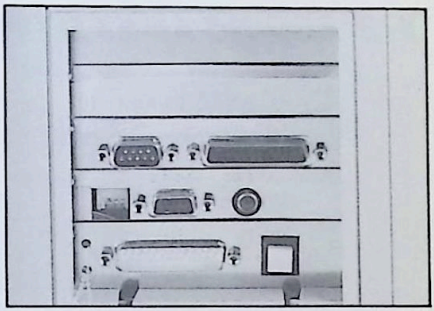


Figure 3-1

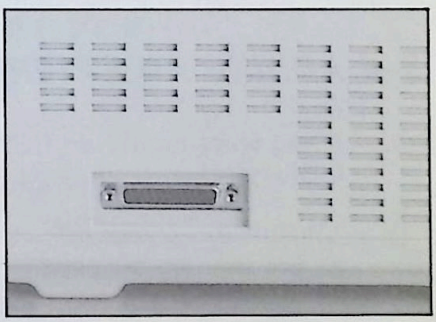


Figure 3-2

3-3 ADDING AN EXTERNAL MGA OR CGA MONITOR

If you want to use an external MGA or CGA monitor, please turn the power off first, then align the DIP switch as belows:

SW1-1	SW1-2	SW1-3	SW1-4	DISPLAY
ON/OFF	OFF	ON	OFF	MGA MONITOR
ON/OFF	OFF	OFF	ON	CGA MONITOR

Remark: The SW1-1 without reverse function. When you useing an external moniter.

3-4 ADDING AN EXTERNAL EGA MONITOR

If you want to add an EGA card to your portable, please follow the instructions as belows:

1) Turn the power off.
2) Set the display card as Secondary and jump PINS 1 & 2 instead of 2 & 3 on display card
3) Align the DIP switch as follows.

SW1-1	SW1-2	SW1-3	SW1-4	DISPLAY
ON/OFF	ON	ON	OFF	MGA MONITOR

4) Set the EGA card as Primary and insert it into free slot.
5) Align the DIP switch as the owner's manual.

SECTION 4

MOVING YOUR COMPUTER

4-1 PREPARING THE RABBIT FOR TRANSPORTATION

Whenever you are planning to move your computer from one location to another, you should use the following steps:

1) Back up all files on the hard disk to floppy disks.

2) Remove floppy diskettes and place with an unused floppy disk. This is to protect the read/write heads from bouncing against each other during transportation and possibly doing damage.

3) Turn off the computer.

4) Lower the display panel into its original place.

5) Lay the coiled keyboard cord into the cable storage tray in the front of the display planel. Replace the hinged feet to their original position. Now place the keyboard/cover in front of the display panel, then sliding the cover latches outward to lock the cover into place.

SECTION 5
TECHNICAL INFORMATION

SECTION 5

5-1 640×400 2-GRAY GAS PLASMA

5-1.1 MERCHANCIAL SPECIFICATIONS

1) Physical Dimension

The outer diensions of the panel are:

System width	: 273 mm
Rigid width	: 265 mm
Hight	: 188 mm
Depth	: 22 mm

2) Weight : 900 g max.

3) Optical Characteristics

Active Area Dimensions

Display area	: 211mm (H) × 132mm (V)
Number of pixels	: 640 (H) × 400 (V)
Pixel size	: 0.20mm (H) × 0.20mm (V)
Pixel pitch	: 0.33mm (H) × 0.33mm (V)

Brightness and Contrast

The conditions to be used for all brightness and contrast measurements will be:

Frame frequency	: 60 ± 0.1 (Hz)
High voltage	: 200 ± 0.1 (V)
Room temperature:	20 ± 3 (°C)

5-1.2 ENVIRONMENTAL CONDITIONS

1) Temperature

Operating : 0 to +55°C
Non-operating: −20 to +75°C

Glass Surface Temperature (Operating):

Ambient +45°C max. with all pixels ON.
(Ambient: 0 to 40°C)

2) Humidity

Operating : 20 to 85% RH (non condensing)
Non-operating: 5 to 85% RH (non condensing)

3) Shock and Vibration

Operating Requirements

Shock	: Shock level	: 10 G	
	Wave form	: 1/2 Shinewave, 11 msec.	
	Direction	: X, Y, Z each axes	
Vibration	: Vibration level	: 0.5 G Sinusodal	
	Frequency range: 50 to 500 Hz		
	Freq. sweep rate: 0.5 octave/minute		

Non-Operating Requirements

Shock	: Shock level	: 20 G
	Wave form	: 1/2 Shinewave, 11 msec.
	Direction	: X, Y, Z each axes
Vibriation	: Vibration	: 1.0 G Sinusodal
	Frequency range: 50 to 500 Hz	
	Freq. sweep rate: 0.5 octave/minute	

5-2 640×400 SUPERTWIST GRAPHIC LCD.

5-2.1 MECHANICAL SPECIFICATIONS:

TABLE 5-1

Parameter	Specifications	Unit
Outline dimensions * 1	266(H)×174(V)×12(D Max)	mm
Effective viewing area	237(H)×151(V)	mm
Display format	640(H)×400(V) full dots	—
Dot size	0.33(H)×0.33(V)	mm
Dot spacing	0.03	mm
Dot color	White	—
Background color	Blue	—
Weight	Approx. 480	g

* 1 Excluding the mounting tab.

5-2.2 ENVIRONMENTAL CONDITIONS

TABLE 5-2

Item	Tstg		Topr		Remarks
	MIN.	MAX.	MIN.	MAX.	
Ambient temperature	−25°C	+60°C	0°	+45°C	Note 4
Humidity	Note 1		Note 1		No condensation
Vibration	Note 2		Note 2		3 directions (X/Y/Z)
Shock	Note 3		Note 3		6 directions (±X/±Y/±Z)

Note 1) Ta* ≤ 40°C.....95% RH Max
Ta > 40°C.....Absolute humidity shall be less than Ta = 40°C/95% RH.
* Ta = Ambient Temperature.

Note 2) Frequency: 10 ~ 55Hz
Vibration width: 1.5mm
Interval: 10Hz ~ 55Hz ~ 10Hz
(1 min)
2 hours for each direction of X/Y/Z (6 hours as total)

Note 3) Shock load: 50G.
Pulse width: 11ms
3 times for each direction of ±X/±Y/±Z.

Note 4) Care should be taken so that the LCD Unit is not exposed to temperature ranges out of the stated specification, or it will go wrong with LCD.

5-3 ENHANCED KEYBOARD

The detachable keyboard has a cable that connects to a DIN connector at the front of the system. This five-wire cable includes power (+5Vdc), ground, two bi-directional signal lines and one turbo ON/OFF signal (Table 5-3). The keyboard uses mechanical keyswitch technology with a microprocessor (8049) performing the keyboard scan function. the keyboard (Figure 5-1) has 102 keys (101 + Turbo key) arranged in three major groups. All keys have the same function as the IBM Enhanced keyboard (XT/AT and DOS compatible), except the Turbo key.

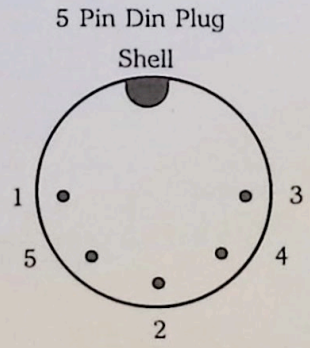
IMPORTANT:

1) To select XT or AT, move the switch to either **X** or **A**. The switch is located under the hinged right foot on the bottom of the keyboard base. (Figure 5-2)

2) If your System is equipped with a 103 keys* (Figure 5-3) (102 + Turbo key) enhanced keyboard and uses DOS 3.3 to run your program then always locate the switch at the **A** position.
   * 103 key keyboard is for non-English versions.

TABLE 5-3

PINS	DESCRIPTION	VOLTAGE
1	Keyboard Clock	+5VDC Signal
2	Keyboard Data	+5VDC Signal
3	TURBO	+5VDC Signal
4	Power	+5VDC
5	Ground	0



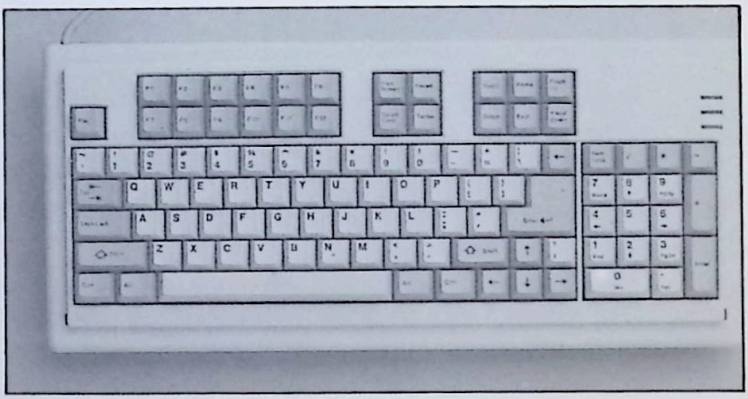


Figure 5-1

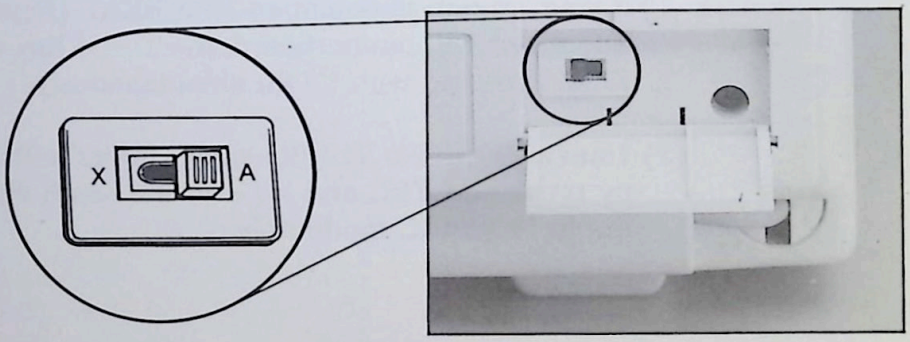


Figure 5-2

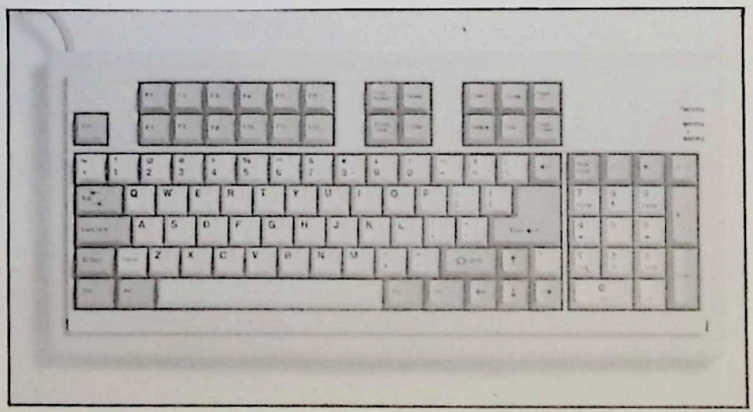


Figure 5-3

5-4 TURBO MODE

The Turbo key (Figure 5-4) allows you to change the operating speed of the system. If you are running at normal speed and want to change the speed to Turbo, press the Turbo key once. To change back to normal speed just press the Turbo key once again.

The turbo LED indicator, located at the upper right corner of the computer case, will light up when the system is running at turbo speed. Please refer to Figure 2-10

Remark: 1) If your system is equipped with NEAT (New Enhanced AT) motherboard, the Turbo Key works when pressing with CTRL simultaneously.

2) You can also use TURBO speed under software by pressing CTRL and +/– at the same time, but in NORMAL mode only.

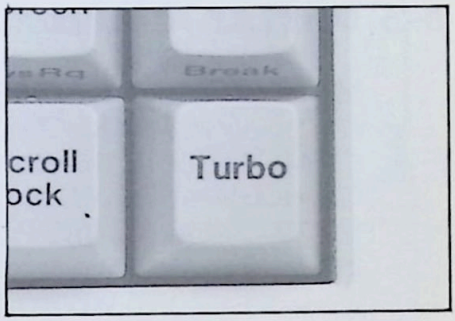


Figure 5-4

5-5 DISPLAY ADAPTOR

MULTI-DISPLAY ADAPTOR

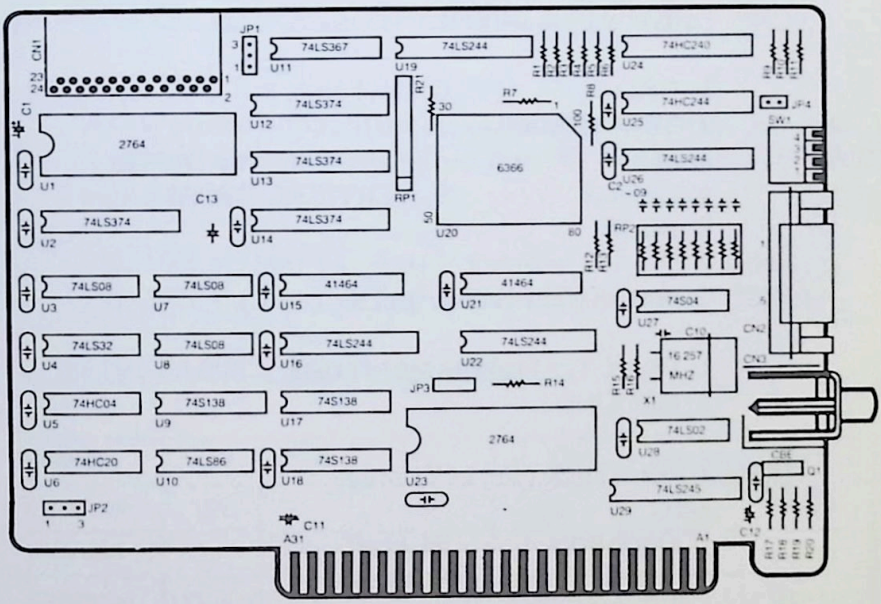
CN1: GAS PLASMA/LCD DISPLAY CABLE CONNECTOR
CN2: EXTERNAL CGA/MGA MONITOR CONNECTOR
CN3: COMPOSITE PHONO JACK
JP1 : LCD BACKLIGHT POWER CONNECTOR (for LCD only)
JP2 : 1-2 SHORT WITH EGA CARD
2-3 SHORT WITHOUT EGA CARD
JP4 : CONNECT TO MOTHERBOARD COLOR/MONO SWITCH EXTENSION 2 JUMPER PINS
SW1: DISPLAY CONFIGURATION DIP SWITCHES.

The Pin Assignments as bellow:
CN1: 24 PIN Ribbon wire connector (for Gas Plasma)

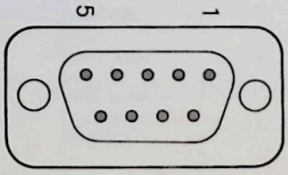
1. GND	9. LD2	17. LD6
2. RESERVE	10. LD3	18. LD7
3. RESERVE	11. FLM	19. +5V
4. RESERVE	12. RESERVE	20. +5V
5. RESERVE	13. LC	21. RESERVE
6. N.C.	14. SCK	22. RESERVE
7. LD0	15. LD4	23. GND
8. LD1	16. LD5	24. GND

CN1: 24 PIN Ribbon wire connector (for LCD)

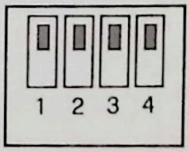
1. GND	9. LD2	17. LD6
2. ECK	10. LD3	18. LD7
3. BACKLIGHT	11. FLM	19. +5V
4. BACKLIGHT	12. M	20. +5V
5. N.C.	13. LC	21. -18V
6. N.C.	14. SCK	22. VO
7. LD 0	15. LD4	23. GND
8. LD 1	16. LD5	24. GND



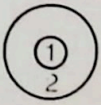
Multi-Display Adaptor



CN2



SW1



CN2: DRIVE 9 PIN D-SHELL CONNECTOR

1. GND	6. INTENSITY
2. SECOND GND	7. VIDEO
3. RED	8. HORIZONTAL DRIVE
4. GREEN	9. VERTICAL DRIVE
5. BLUE	

CN3: COMPOSITE PHONO JACK

1. PEAK TO PEAK AMPLITUDE
2. GROUND

JP1 : 3 PIN STICK (for LCD only)

1. GROUND	BLACK
2. –18V	YELLOW
3. AC 110V	RED

JP2 : 3 PIN STICK

Jump pins 1 & 2 together if you have an EGA card installed
Jump pins 2 & 3 together if you have no EGA card.

JP4 : 2 PIN STICK CONNECTOR

SW1: 4 PIN DISPLAY CONFIGURATION DIP SETTING
See page 9 for proper setting of these switches.

5-6 POWER SUPPLY SPECIFICATIONS

1) AC INPUT
The power supply has an automatically senses AC line voltage and adjusts itself to operate with either 110 V.A.C. or 220 V V.A.C.

A. 95 V (Min.) — 110 V (normal) — 130 V (Max.)
B. 185 V (Min.) — 220 V (normal) — 260 V (Max.)

2) DC OUTPUT (FOR GAS PLASMA)

voltage	+ 5V	+ 12V	- 5V	- 12V	+ 200V (HV)	+ 5V (NVCC)
max load	15A	3.5A	0.3A	0.3A	150mA	100mA
min load	5A	0.5A	0	0	15mA	—
regulation	4.8V–5.2V	11V–13V	-5.5V - -4.5V	-13V - -11V	195V–205V	4.75V - 5.25V
noise & ripple	50mV	120mV	200mV	240mV	1(Vpp) max.)	—

3) DC OUTPUT (FOR LCD)

TABLE 5-4

voltage	+5V	+12V	-5V	-12V	-18V
max load	15A	3.5A	0.3A	0.3A	0.1A
min load	5A	0.5A	0	0	0
regulation	4.8V ~ 5.2V	11V ~ 13V	-5.5V ~ -4.5V	-13V ~ -11V	-18.45V ~ 17.55V
noise & ripple	50mV	120mV	200mV	240mV	240mV

4) AC OUTPUT for LCD BACKLIGHT (FOR LCD ONLY)

Voltage : peak to peak 300-320 V
Frequency : 600 Hz – 800 Hz adjustable
Output Current: 80mA MAX.

5) Table 5-6 shows the circuit protection at various voltages:

TABLE 5-5

voltage	No under	No over
+5V	4.75V	5.25V
+12V	10.5V	13V
-5V	-4.5V	-5.5V
-12V	+10.5V	-13V

* Short circuit protection at any operation voltage
* The power supply will shut down when operation power is over 180W-LCD/200W-Gas Plasma.
* Open circuit protection only for +5V

The power supply provides a "Power Good" signal to indicate proper operation of the power supply. The "Power Good" hold-up time is 15mS minimum.

The power supply has six sets of power connectors, the pin asignments as below:

4 PIN HARD DISK DRIVE POWER CONNECTOR:

1. +12V	YELLOW
2. GND	BLACK
3. GND	BLACK
4. +5V	RED

2 SETS OF 4 PIN FLOPPY DISKETTE DRIVE POWER CONNECTORS:

1. +12V	YELLOW
2. GND	BLACK
3. GND	BLACK
4. +5V	RED

6 PIN (P9) MOTHER BOARD POWER CONNECTOR:

1. GND	BLACK
2. GND	BLACK
3. −5V	WHITE
4. +5V	RED
5. +5V	RED
6. +5V	RED

6 PIN (P8) MOTHER BOARD POWER CONNECTOR:

1. POWER GOOD	ORANGE
2. +5V	RED
3. +12V	YELLOW
4. −12V	BLUE
5. GND	BLACK
6. GND	BLACK

4 PIN GAS PLASMA POWER CONNECTOR, MALE (FOR GAS PLASMA)

1. LOGIC GND	BLACK
2. +200V (+HV)	RED
3. +5V (NVCC)	WHITE
4. GND (−HV, −NVCC)	YELLOW)

NOTE: LOGIC GND CAN NOT BE CONNECTED WITH GND

4 PIN GAS PLASMA CONNECTOR, FEMALE (FOR POWER SUPPLY)

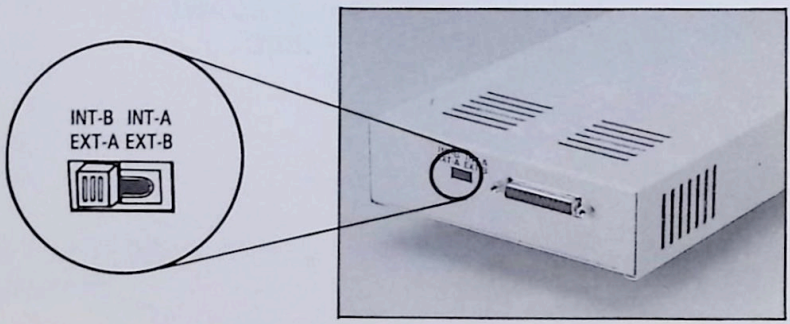
1. LOGIC GND	BLACK
2. +200V (+HV)	WHITE
3. +5V (NVCC)	GRAY
4. GND (–HV, –NVCC)	PURPLE

3 PIN LCD & BACKLIGHT POWER CONNECTOR:

1. AC GND	BLACK
2. –18V	YELLOW
3. AC 110 V, 800 HZ	RED

5-7 EXTERNAL 5-1/4 INCH FLOPPY DISKETTE DRIVE CASE

When your portable is equipped with external 5¼ inch FDD, you can boot your system diskette from either internal 3½ inch FDD or external 5¼ inch FDD. There is a slide switch at the back of the external FDD CASE (Figure 5-5). Please refer to section 2-5 to run the setup program after you change the system configuration.



If you want to boot your system from external 5¼" FDD for the first, please follow the instructions as belows:

1. Adjust the switch located at the back of the external 5¼" FDD case at "INT-B, EXT-A".
2. Run the setup program and default A drive as 5¼" 1.2MB instead of 3½" 1.44MB, B drive as 3½" 1.44MB.
3. Insert 5¼" floppy disk with DOS system in external 5¼" floppy disk drive to reboot your machine.

The external 5¼" floppy disk drive port pin assignments are as follows:

1) Female D-Type 25 PIN CONNECTORS

EXTERNAL 5¼" FDD SIDE			COMPUTER SIDE
	← — REDUCED WRITE	1	
	← — INDEX	2	
	→ M × 14	3	
	← M × 10	4	
	← — DIRECTION SELECT	5	
	← — STEP	6	
	← — WRITE DATA	7	
	← — WRITE GATE	8	
	→ — TRACK 00	9	
	→ — WRITE PROTECT	10	
	→ — READ DATA	11	
	→ — SIDE 1 SELECT	12	
	→ — DISKETTE CHANGE	13	
	← + 5 V	14	
	← + 5 V	15	
	← + 12 V	16	
	← + 12 V	17	
	→ M × S	18	
	GND	19	
	GND	20	
	GND	21	
	GND	22	
	GND	23	
	GND	24	
	GND	25	

2) FCI EDGE CARD CONNECTOR (INSIDE THE EXTERNAL 5¼" FDD CASE) PIN ASSIGNMENTS.

1 GND	— Reduced Write	2
3 GND	N.C.	4
5 GND	N.C.	6
7 GND	— INDEX	8
9 GND	N.C.	10
11 GND	M × 14	12
13 GND	N.C.	14
15 GND	M × 10	16
17 GND	— Direction Select	18
19 GND	— Step	20
21 GND	— Write data	22
23 GND	— Write gate	24
25 GND	— Track 00	26
27 GND	— Write protect	28
29 GND	— Read data	30
31 GND	— Side 1 Select	32
33 GND	— Diskette Change	34

3) PCI EXTERNAL 5¼" FDD POWER CONNECTOR (INSIDE THE 5¼" FDD CASE):

1. +12V	YELLOW
2. GND	BLACK
3. GND	BLACK
4. +5V	RED

APPENDIX

DIMENSIONS

Dimensions : Comptuer (H × W × D)
24 × 41 × 21 CM (9.45″ × 16″ × 8.27″)

External 5¼″ FDD (H × W × D)
48 × 139.5 × 250 MM (1.89″ × 5.49″ × 9.8″)

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